

Application No.: 09/325963

Case No.: S4664US002

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Withdrawn) A continuous process for producing a breathable foam comprising:
mixing at least one thermoplastic polymer with at least one blowing agent to form a foamable solution,
feeding the foamable solution into a shaping orifice,
causing the foamable solution to form a foam material having at least one major surface at or about the time it exits the shaping orifice, and
uniaxially drawing the foam at a rate such that at least one foam cell ruptures at or about the time the cell exits the shaping orifice, and wherein the resulting foam is porous in a direction perpendicular to a major surface of the foam.
2. (Withdrawn) The method of claim 1 wherein the blowing agent is a chemical blowing agent.
3. (Withdrawn) The method of claim 1 wherein the shaping orifice is a flat film die.
4. (Withdrawn) The method of claim 1 wherein the thermoplastic polymer is an amorphous polymer.
5. (Withdrawn) The method of claim 1 wherein the thermoplastic polymer is an elastomer or thermoplastic elastomer.

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6. (Withdrawn) The method of claim 5 wherein the thermoplastic polymer has a glass transition temperature less than 20°C.
7. (Withdrawn) The method of claim 1 wherein the uniaxial draw rate is chosen to provide the resulting foam article with an MVTR of at least 300 grams per square meter per 24 hours.
8. (Withdrawn) The method of claim 1 wherein the uniaxial drawing anisotropically orients the foam such that the foam is significantly more elastic in the cross-web direction than in the machine direction.
9. (Withdrawn) The method of claim 1 further comprising stretching the breathable foam in one or more directions after it has cooled to ambient temperature.
10. (Withdrawn) The method of claim 1 further comprising affixing a material onto at least one major surface of the foam.
11. (Withdrawn) The method of claim 10 wherein the material is affixed by extrusion lamination.
12. (Withdrawn) The method of claim 11 wherein the laminated material is selected from the group consisting of barrier materials, release materials, nonwoven materials, woven materials, and pressure sensitive adhesive materials.
13. (Canceled).
14. (Canceled).

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15. (Canceled).

16. (Canceled).

17. (Canceled).

18. (Withdrawn) A continuous process for making a multi-layer structure containing breathable foam comprising:

mixing at least one thermoplastic polymer with at least one blowing agent to form a foamable solution,

separately feeding the foamable solution and one or more additional thermoplastic materials into a shaping orifice whereby the foamable solution forms at least one layer and the additional thermoplastic material forms at least one layer of a multi-layered structure having at least one major surface,

causing the foamable solution to form a foam at or about the time it exits the shaping orifice, and

uniaxially drawing the multi-layer structure at a rate such that at least one foam cell ruptures at or about the time the cell exits the shaping orifice, and wherein the resulting multi-layer structure is porous in a direction perpendicular to a major surface of the multi-layer structure.

19. (Withdrawn) The method of claim 18 wherein the blowing agent is a chemical blowing agent.

20. (Withdrawn) The method of claim 18 wherein the additional thermoplastic material comprises at least one outermost layer in a multi-layer construction.

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21. (Withdrawn) The method of claim 18 wherein the thermoplastic polymer is a thermoplastic elastomer.

22. (Withdrawn) The method of claim 18 wherein the additional thermoplastic material is a semi-crystalline polymer and the foamable solution comprises an amorphous thermoplastic polymer.

23. (Withdrawn) The method of claim 18 wherein the additional thermoplastic material comprises an amorphous polymer.

24. (Withdrawn) The method of claim 18 further comprising affixing a material onto at least one major surface of the multi-layer construction.

25. (Canceled).

26. (Canceled).

27. (Canceled).

28. (Canceled).

29. (Currently Amended) An article comprising a breathable three layer ABA or ABC structure, said article comprising:

(a) an inner core layer having a thickness of about 86 to about 265 microns, said inner core wherein the B-layer comprising is a breathable thermoplastic foam having at least one major surface and at least one foam cell that was ruptured

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by stretching the article, wherein the inner core layer has having breathability in a direction perpendicular to a major surface of the foam, the porosity of which may be increased during use by stretching, wherein the porosity is either reversibly or irreversibly changed upon release from stretching by controlling the amount of stretching of the foam and

(b) wherein two outer skin the A layers each of which comprise an unfoamed, polymeric material selected from the group consisting of amorphous or non-amorphous thermoplastic materials, elastomers, thermoplastic elastomers, and semi-crystalline polymers, wherein at least one of the outer skin layers has sufficient thickness to prevent rupture of the outer skin layer when the foam cell of the inner foam layer is ruptured by stretching the article.

30. (Original) The article of claim 29 wherein the B layer is a thermoplastic elastomer.

31. (Currently amended) The article of claim 29 having a moisture vapor transmission rate greater than 300 grams per square meter per 24 hours.

32. (Previously presented) The article of claim 29 further comprising a pressure sensitive adhesive layer affixed to a major surface of at least one A layer.

33. (Original) The article of claim 29 further comprising a material laminated to at least one A layer.

34. (Canceled).

35. (Canceled).